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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,969

01/05/2004

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11/01/2007

EXAMINER

SMITH, NICHOLAS A

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/750,969	Applicant(s) EIN-ELI ET AL.	
	Examiner Nicholas A. Smith	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17, 20-69 and 71-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 20-69 and 71-92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Status of Claims

1. Claims 1-17, 20-69 and 71-92 remain for examination.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-2, 7-9, 11-14, 16, 17, 22, 25, 27-30, 35-36, 38-39, 41 and 44-49 are rejected under 35 U.S.C. 102(a) as being anticipated by Ein-Eli et al, "Silicon Texturing In Alkaline Media Conducted Under Extreme Negative Potentials," *Electrochem. & Solid State Letters*, 6(3):C47-C50, 2003 as submitted on 2 November 2004 in Applicant's Information Disclosure Statement.
4. Ein-Eli et al. is applied to the claims for the same reasons as stated in paragraph(s) 5-8 of the previous office action.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 3-6, 10, 15, 23-24, 26, 31, 40 and 42-43 are rejected under 35 U.S.C.

103(a) as being unpatentable over Ein-Eli et al. in view of Starosvetsky et al. (US 6,521,118).

7. Ein-Eli et al. in view of Starosvetsky et al. is applied to the claims for the same reasons as stated in paragraph(s) 11-14 of the previous office action.

8. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ein-Eli et al. in view of Sato (US 6,413,874).

9. Ein-Eli et al. in view of Sato is applied to the claims for the same reasons as stated in paragraph(s) 16-17 of the previous office action.

10. Claims 21, 32-34, 37 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ein-Eli et al.

11. Ein-Eli et al. is applied to the claims for the same reasons as stated in paragraph(s) 19-22 of the previous office action.

12. Claim 53-69 and 71-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ein-Eli et al. in view of Sato.

13. Ein-Eli et al. in view of Sato is applied to the claims for the same reasons as stated in paragraph(s) 24-26 of the previous office action.

14. Claims 1-2, 7-9, 11-14, 16, 17, 22, 25, 27-30, 35-36, 38-39, 41 and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starosvetsky et al., "Environmentally Friendly, Fast Electrochemical Etching of Silicon", *Electrochemical Society Proceedings*, Proceedings Vol. 2002-14, pp 286-29 (Starosvetsky et al.' *Electro*) as submitted on 2 November 2004 in Applicant's Information Disclosure Statement.

15. Starosvetsky et al. '*Electro* is applied to the claims for the same reasons as stated in paragraph(s) 28-31 of the previous office action.

16. Claims 3-6, 10, 15, 23-24, 26, 31-34, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starosvetsky et al. '*Electro* in view of Starosvetsky et al. (US 6,521,118).

17. Starosvetsky et al. '*Electro* in view of Starosvetsky et al. is applied to the claims for the same reasons as stated in paragraph(s) 33-38 of the previous office action.

18. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Starosvetsky et al. '*Electro* in view of Sato (US 6,413,874).

19. Starosvetsky et al. '*Electro* in view of Sato is applied to the claims for the same reasons as stated in paragraph(s) 40-41 of the previous office action.

20. Claims 21 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starosvetsky et al. '*Electro* in view of Vazsonyi et al., "Improved Anisotropic Etching Process for Industrial Texturing of Silicon Solar Cells", *Solar Energy Materials & Solar Cells*, 57:179-188, 1999 as submitted on 2 November 2004 in Applicant's Information Disclosure Statement.

21. Starosvetsky et al. '*Electro* in view of Vazsonyi et al. is applied to the claims for the same reasons as stated in paragraph(s) 43-46 of the previous office action.

22. Claim 53-69 and 71-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starosvetsky et al. '*Electro* in view of Sato.

23. Starosvetsky et al. '*Electro* in view of Sato is applied to the claims for the same reasons as stated in paragraph(s) 48-50 of the previous office action.

***Response to Arguments***

24. Applicant's arguments filed 15 August 2007 have been fully considered but they are not persuasive. In regards to Applicant's argument that Ein-Eli et al. has the same inventors as the instant application and therefore doesn't qualify as 102(a) prior art, Examiner notes that only two inventors in the prior art document of the three inventors in the instant application are common; thus Ein-Eli et al. is by another inventive entity. In regards to Applicant's argument that Starosvetsky et al. '*Electro* does not show the increasing current density as instantly claimed and that instant application demonstrates criticality, Applicant is reminded that criticality must be established between  $-60\text{V}$  and  $-60.01\text{V}$  to grant patentability of the claimed range  $-60\text{V}$  or more. Applicant may have shown an effect for  $-80\text{ V}$  or  $-100\text{V}$ , but does not accurately point out difference between  $-60\text{V}$  and  $-60.01\text{V}$  with this data. Furthermore, specification paragraph [204] only compares to less than  $-60\text{ V}$ , not even  $-60\text{ V}$  as in prior art. In regards to Applicant's argument that Starosvetsky et al. '*Electro* in view of Sato does not claimed current effect, Applicant is reminded that Starosvetsky et al. '*Electro* in view of Sato show the same active steps and Applicant has not pointed out how prior art and instant application differ.

***Conclusion***

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas A. Smith whose telephone number is (571)-272-8760. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on (571)-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAS

*Amy Leary Iste*  
Supervisory Patent Examiner